



Coastal Zone Permit Application

Public Hearing
May 3, 2023

Project Maxwell – Unit 45 Plant



New Castle Site

The facility was originally purpose built in 1993 for water-based ink formulation

Water-based inks are environmentally friendly in comparison to traditional printing techniques which use a lot of solvents and hazardous chemicals

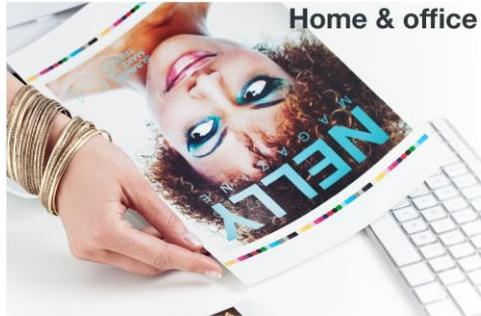
The product range was expanded in 2021 to include the Reactive Dispersants (RxD) product line which is the color used in ink

This permit modification is to request expansion of the RxD operation

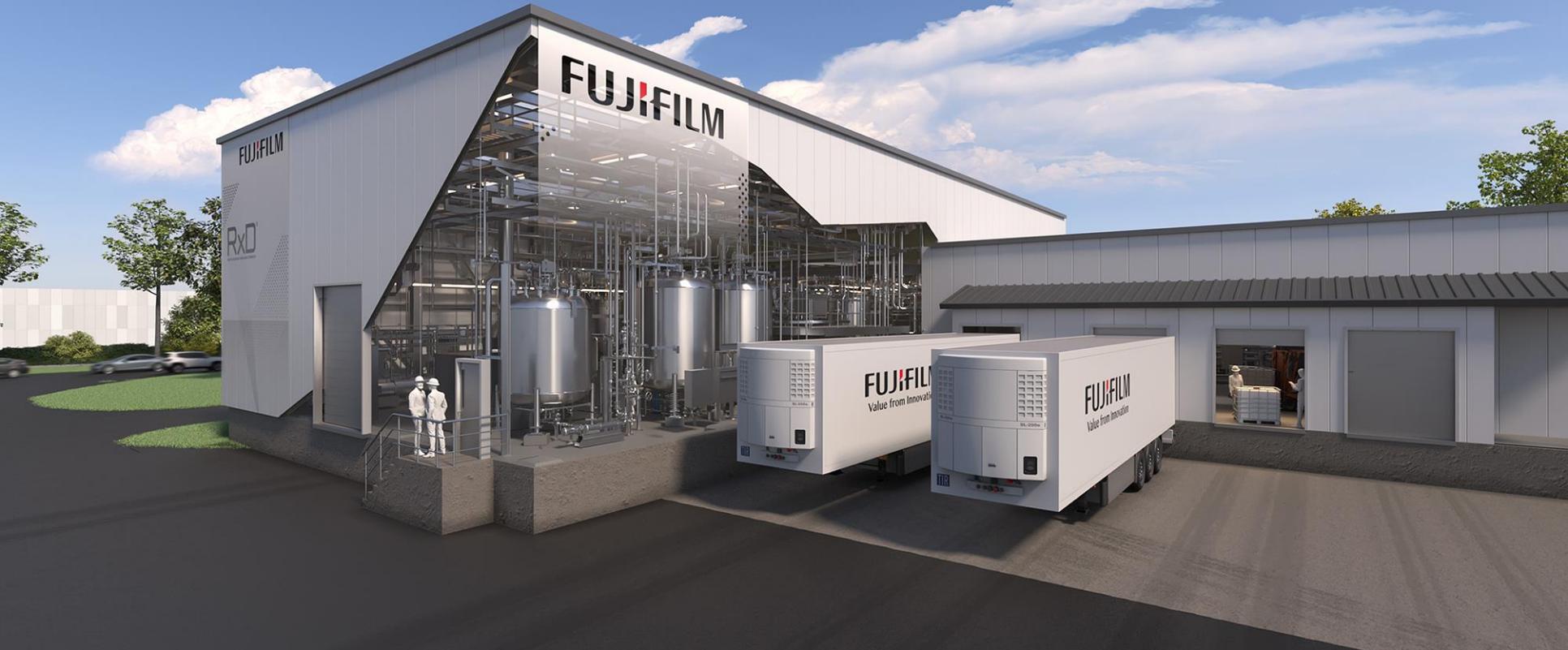


Fujifilm ink is everywhere

Fujifilm ink technology colours prints and printed products across 1000s of applications.



Unit 45 Plant – Project Maxwell



RxD Capacity Expansion at New Castle Site

RxD is the proprietary Fujifilm reactive dispersant cross-linking technology. It is the enabling technology in Fujifilm's high quality water-based pigment dispersions and creates a highly stable product which is used in ink manufacture.

Making RxD at New Castle:

- expands the global footprint of RxD and enhances our business continuity
- streamlines the supply chain for RxD used in ink manufacturing
- enables a more efficient supply chain for RxD reaching NA, SA, and LA regions
- supports strategic initiatives to develop business in packaging by integrating GMP standards



Project Maxwell – Economic Benefits

- Construction to hire 85-125 workers throughout the project construction timeline
- Construction spend approximately \$7,000,000-\$9,000,000
- Construction services will include engineering, general construction, electrical, plumbing, HVAC upgrades and electrical interconnections
- Approximately 11 full-time employees are projected for hire to provide support operation of the RXD plant



Project Maxwell – Environmental

- The environmental impact is minimal – there are no volatile organic compounds (VOCs) or Hazardous Air Pollutants (HAPs) emitted from the process since it is a closed loop process.
- All waste products are managed in accordance with our ISO 14001 Environmental Management System.
- Large portions of total waste are incorporated in re-use and recycling (i.e. plastic drums, IBCs and steel drums).
- Waste from FUJIFILM is sent to Waste to Energy Plants.
- Environmental noise will not be an issue.
- Air emissions will increase slightly due to boilers required to heat water.
 - The boilers are natural gas, have low nitrogen oxide burner technology and were selected for their minimal emission output.
 - The selected boilers are below regulatory thresholds, require no air permit, and are not considered to be a hazard to health.



Project Maxwell – Environmental Offsets

- FUJIFILM will offset the new plants projected 4.024 tons per year (TPY) of emissions by an offset of 4.426 tons per year (1.1 x emission rate).
- To accomplish offset emission requirements, FFIC will:
 - Retire two small older industrial boilers and replace with two high efficiency, low NOx boilers.
 - Replace three propane (combustion) forklifts with three electric forklifts.
 - Install solar panels on the site to generate approximately 36.24 MWh per year to create renewable energy to power the charging of the site forklifts.
 - Purchase one (1) Nitrogen Oxide (NOx) Emission Reduction Credit to offset the emissions from the Delaware Small Business Division ERC Program.
- The three propane operated forklifts will be removed from the site prior to commencement of the Unit 45 operations.



Project Maxwell – Other Environmental Initiatives

- Removal of the gas-powered Maintenance van and utilizing two electric carts
- Installation of two dual port Level 2 Electric Vehicle (EV) charges
- Participate in the annual Christina River Watershed Cleanup
- Recycling programs for pallets, totes, drums, cardboard and paper = less to landfill
- Water recycling unit = less water wasted
- Changed to LED lighting = more energy efficient
- Demolished old buildings – cleaned up the site and created more green space





FUJIFILM
Value from Innovation